Black fever in India: an epidemic rooted in poverty

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Kala-Azar—known medically as visceral leishmaniasis and in popular English as black fever—is a curable illness, but it has become the second most fatal parasitic disease in India, claiming 60,000 victims annually. Only malaria causes a higher number of deaths. Most of the victims of black fever are from India's rural poor.

Black fever's impact on public health was grossly underestimated until a rapid increase in the number of infections and the breadth of infected areas was noted during the last decade. An estimated 350 million people in 88 countries in inter-tropical and temperate regions are said to be at risk from the disease.

Visceral leishmaniasis is caused by a microscopic parasite transmitted by the phlebozomine sand fly, and inflicts those infected with irregular bouts of fever, fatigue, substantial weight loss, swelling of the lymph nodes, spleen and the liver, and anaemia. It is also associated with the spread of potentially fatal secondary infections such as pneumonia. If untreated or inadequately treated, black fever usually results in death.

India accounts for half of the 600,000 visceral leishmaniasis infections that are annually recorded worldwide. Most of the cases in India come from the northern and eastern states of Bihar, Utter Pradesh, West Bengal and Orissa, with Bihar alone accounting for ninety percent of all India's black fever victims.

In Bihar, India's third most populous state, the disease has grown by leaps and bounds since 1977. In that year only 17 districts were deemed affected by black fever. Today 33 of Bihar's 37 districts routinely report black fever cases and 23 districts are considered to be severely affected.

Although it is known to have the most fertile land in all of India, Bihar is one of the country's poorest states. Forty-four percent of Bihar's 83 million people live under the official poverty line and 34 percent cannot afford even one proper meal per day.

The majority of those afflicted with black fever are from the families of landless agricultural labourers. The labourers are employed at home for between four and nine months per year and spend the remainder of the year seeking work in states like Punjab and Delhi, where recent capital investment has been concentrated. The single-room, thatched mud huts that the agricultural labourers inhabit offer a perfect breeding ground for the sand flies, which lay their eggs in the crevices found in the mud walls and flourish in the huts' high humidity environment during monsoon season.

Floods (which are endemic in Bihar, due to the lack of proper infrastructure) and poor sanitation also help the spread of the phlebozomine sand fly and, like malnutrition, contribute to lowering the labourers' general health, making them more susceptible to infections, including black fever.

The Kala-Azar epidemic has been compounded by the disease's increasing resistance to standard antibiotics and by the privatization of India's health care system.

India's public health care system was always woefully inadequate. But since the Indian bourgeoisie abandoned its post-independence national economic strategy in favor of making India a magnet for foreign investment through privatization, deregulation and social spending cuts, government investment in health care has plummeted. Prior to 1991, government investment in public health care amounted to 6 percent of Gross Domestic Product (GDP). In just over a decade this figure had fallen to .9 percent, placing India among the handful of countries worldwide that spend less than 1 percent of their GDP on health care. Indeed, only four countries are deemed to spend less per capita on public health care than does India.

In sharp contrast, India ranks an impressive 18th in private health care spending (equal to 4.2 per cent of GDP). According to Ravi Duggal of the Centre for Enquiry into Health and Allied Themes (CEHAT), private health care accounts for 70 per cent of primary medical care and 40 per cent of all hospital care in India and employs 80 per cent of the country's medical personnel.

The World Health Organisation's "Commission on Macroeconomics and Health in India" recently reported that India's public health sector faces a severe shortage of qualified doctors and inadequate or non-existent infrastructure. Per 10,000 persons, only 45 registered medical practitioners and 8.9 hospital beds are available.

Because of the lack of public services, even poor Indians are increasingly reliant on private health care. A survey of 100 Rajasthan villages by researchers from the Massachusetts Institute of Technology and Princeton University found that even among poor households only 34 per cent used public

health facilities. And, in the absence of adequate public health care, many are turning to amateur "doctors" and faith healers, even to treat such deadly diseases as tuberculosis (TB) and malaria.

Because of the cost of travel and the fear of losing income while they are away, the rural sick tend to seek out the moderately better health care services that are available in India's towns and cities only when they are gravely ill. As a result, the treatments they require are far more costly. Conditions that could be easily treated, and at little expense, often prove fatal because they have reached the advance stage by the time rural Indians seek treatment.

Because half of all *Kala-Azar* patients now fail to respond to the conventional drug treatment for the disease, the cost of treating black fever has risen substantially, making it prohibitively expensive for the poor to seek help from private sector physicians and hospitals. The average black fever patient requires a month-long hospitalisation, with daily injections costing a total of $100 US per patient, or five times the average monthly income of a five-person family in rural Bihar. But given the state of the public health care system, using private medical services is increasingly the only option. As a result many are forced to turn to private money-lenders, who charge interest rates of up to 34 percent per annum. This is by no means a problem restricted to black fever victims. Health costs are now the single largest contributor to rural debt.

Liberalisation of the health sector has also put an end to the government's control over the distribution and pricing of many ordinary drugs. As a result many are now out of the reach of the poor. The Indian pharmaceutical industry, meanwhile, has seen its profits soar. Drug prices have risen steadily since the previous BJP(Baratiya Janata Party)-led NDA (National Democratic Alliance) government passed legislation to comply with the WTO's rules on intellectual property. Last year India's 11 leading drug companies reported a phenomenal 23 percent increase in revenues.

The Indian government has identified the pharmaceutical industry, along with computer software and business processing, as key to its strategy of export-led growth. But the expansion of the India's pharmaceutical industry holds out little hope for the victims of diseases such as black fever that primarily affect the poor.

According to public health analyst Mira Shiva, "India produces and sells drugs at the lowest prices anywhere in the world but the levels of poverty are such that less than 25 percent of India's one billion people can afford medicine. ... Liberalisation has only widened the gap." In an interview with the People's Health Movement website, Shiva elaborated further, "India is still battling vector and water-borne diseases but no pharmaceutical company is interested in producing or marketing drugs against these because of the low profit margins, while there is competition for diseases such as diabetes and heart problems, which mostly affect the affluent."

Black fever is a curable disease. The pharmaceutical industry in India and internationally clearly has the technical prowess to develop affordable drugs to fight it. But big business has little interest in producing drugs to benefit India's poor. They are too busy developing curable drugs and medications for the well-off in India and the advanced capitalist countries, including 'mood elevators,' diet pills, and drugs for baldness.

In the absence of serious research by the pharmaceutical industry, the Institute for One World Health, a US non-profit organisation, is working with volunteer medical personnel in India to try to develop a new treatment for *Kala-Azar*. One World Health has been conducting clinical trials on a new, cheaper drug in Bihar, and hopes before the end of 2005 to receive approval from Indian government regulators to distribute it generally.

According to Dr. Shyam Sundar, who is a professor of medicine at Banares Hindu University and the person leading the One-World trials in Bihar, the new treatment, which does not require hospitalization to administer, is expected to cost $50US. While this is half the cost of the current drug and patients will potentially save money because they can remain at home while taking the drug, $50 still represents a large, if not prohibitive, sum for Bihar's poor. Also the treatment does remove the threat of a repeat infection.

The only means to eradicate black fever as a fatal disease is to develop adequate social and medical infrastructure, as well as affordable medication.

Instead the growth of rural poverty, the plight of broad masses in the urban cities, and the destruction of the public health system is creating conditions for an expansion of the epidemic to other regions. Recently *Kala-Azar* has increased amongst HIV/AIDS patients. India has the second largest concentration of HIV/AIDS patients after Africa and a further spread of *Kala-Azar* could result in a health disaster. Nepal, which borders Bihar, is already reporting thousands of *Kala-Azar* victims, and this figure could swell to tens if not hundreds of thousands if urgent action is not taken.